

PATENT CLAIMS

1.-20. (canceled)

21. (new) A method for at least partially transmitting a message cell in an access communication network via a packet-oriented communication network, the access communication network having priorities that can be assigned to the message, the message cell is transmitted via the access communication network in accordance with the priorities assigned comprising:

adding the message cell to a user data field of a data packet of the packet-oriented communication network, each message cell added to the same user data field having the same assigned priority;

deriving a transmission priority from the priority of the added message cell;  
assigning the derived priority to the data packet; and

partially transmitting the data packet according to the assigned transmission priority via the packet-oriented communication network.

22. (new) The method according to Claim 21, wherein insert functions are provided in the communication network selected from the group consisting of access communication network, packet-oriented communication network, and combination thereof by means of which functions, for each priority provided in the first communication network respectively the data packet comprising the correspondingly derived transmission priority is formed, the message cell comprising the corresponding priority is added to the user data field of the data packet, and the data packet is at least partially transmitted via the packet-oriented communication network.

23. (new) The method according to Claim 21, wherein the message cell is transmitted within the framework of the virtual connections set up over the access communication network, the assigned priority of the message cell transmitted via one of the virtual connections represents a connection-particular priority.

24. (new) The method according to Claim 23, wherein a further connection-particular transmission parameter in addition to the connection-particular priority is assigned to the message cell.

25. (new) The method according to Claim 24, wherein the insert functions are designed such that the message cell is at least partially forwarded via the packet-oriented communication network according to the further connection-particular transmission parameter of the message cell.

26. (new) The method according to Claim 21, wherein the access communication network is designed in accordance with the asynchronous transfer mode, in that by means of the priorities provided in the access communication network respectively, a traffic type defined in accordance with the asynchronous transfer mode forum and ITU-T is represented, or a specific asynchronous transfer mode service class is represented.

27. (new) The method according to Claim 26, wherein a cell delay variation tolerance specified as part of an established asynchronous transfer mode connection is represented by the further assigned connection-particular transmission parameter.

28. (new) The method according to Claim 27, wherein the insert functions are designed in such a way that the message cell is partially forwarded via the packet-oriented communication network according to the lowest specified cell delay variation tolerance value of the message cell.

29. (new) The method according to Claim 21, wherein the second packet-oriented communication network and the data packets transmitted therein are designed in accordance with the IEEE standard 802.3.

30. (new) The method according to Claim 29, wherein the data packets transmitted via the packet-oriented communication network are designed in accordance with the IEEE standard 802.1Q-1998, whereby the transmission priority allocated to the data packet transmitted is determined by the user\_priority information in the tag control information data field of the Ethernet-encoded tag header.

31. (new) The method according to Claim 21, wherein information representing a number of the message cells added to the user data field is added to the data packet.

32. (new) The method according to Claim 21, wherein a destination information is added to the data packet, the data packet and the message cell therein are transmitted to a destination represented by the destination information of the data packet in the packet-oriented communication network.

33. (new) The method according to Claim 32, wherein the message cell transmitted are forwarded according to routing information contained in the message cells.

34. (new) The method according to Claim 32, wherein user information contained in the message cell is forwarded according to routing information contained in the respective message cells.

35. (new) A communication arrangement to at least partially transmit message cells to be transmitted in a first communication network via a second packet-oriented communication network, comprising:

priorities that can be assigned respectively to the message cells are provided in the first communication network, the message cells are transmitted via the first communication network according to the respective priorities assigned;

insert tools are provided in the network selected from the group consisting of first communication network, second communication network, and a combination thereof, by means of which tools at least one of the message cells to be transmitted and comprising the same assigned priority are added to a user data field of at least one data packet of the second packet-oriented communication network; and

further assign tools are allocated to the insert tools, by means of which assign tools a transmission priority derived from the priority of the at least one added message cell is assigned to the at least one data packet,

wherein the insert and assign tools are designed in such that the at least one data packet is at least partially transmitted together with the at least one added message cell according to the assigned transmission priority via the second packet-oriented communication network.

36. (new) The communication arrangement according to Claim 35, wherein the insert and assign tools are designed such that for each priority provided in the first communication network respectively the at least one data packet comprising the

correspondingly derived transmission priority is formed, the at least one message cell comprising the corresponding priority is added to the user data field of the at least one formed data packet, and the at least one data packet is at least partially transmitted via the second communication network.

37. (new) The communication arrangement according to Claim 35 wherein the insert tools are designed such that the at least one message cell to be transmitted and comprising the same assigned priority is added to the user data field of the respective at least one data packet and the at least one data packet is at least partially forwarded via the packet-oriented communication network according to the at least one further connection-particular transmission parameter assigned to the respective at least one message cell added to the user data field.

38. (new) A communication device that at least partially transmit message cells to be transmitted in a first communication network via a second packet-oriented communication network arranged in the communication device, the first communication network assigns a priority to the message cells, the message cells are transmitted via the first communication network according to the priority assigned, comprising

insert tools are provided in the communication device, by means of which tools at least one of the message cells to be transmitted and comprising the same assigned priority are added to a user data field of at least one data packet of the second packet-oriented communication network; and

further assign tools assigned to the insert tools are arranged in the communication device, by means of which assign tools a transmission priority derived from the priority of the at least one added message cell is assigned to the at least one data packet,

wherein the insert and assign tools are designed in such a way that the at least one data packet is at least partially transmitted together with the at least one added message cell according to the assigned transmission priority via the second packet-oriented communication network.

39. (new) The communication device according to Claim 38, wherein the insert and assign tools are designed in such a way that for each priority provided in the first communication network respectively the at least one data packet comprising the correspondingly derived transmission priority is formed, the at least one message cell

comprising the corresponding priority is added to the user data field of the at least one formed data packet, and at least one data packet is at least partially transmitted via the second communication network.

40. (new) The communication device according to Claim 38, wherein the insert and assign tools are arranged respectively on at least one connection unit arranged in the communication device and connected to the first and second communication network and/or on at least one central unit centrally arranged in the communication device and connected to the first and second communication network.